

AMENDMENTS

In the Claims

Please substitute the following amended claims for the pending claims having the same number:

D1
Puh
F.1

Claim 1. (Amended) A method for forming a trimmed gate in a transistor comprising the steps of:
forming a polysilicon portion of a gate conductor on a substrate having a semiconductor portion; and
trimming the polysilicon portion by a film growth method selective to laser-absorbing polysilicon.

2
D
Puh
F.1

Claim 14. (Amended) A method for forming selectively compensated semiconductor devices comprising the steps of:
forming a plurality of polysilicon portions of gate conductors on a substrate having a semiconductor portion;
masking at least one polysilicon portion intended for a n-channel device;
trimming at least one unmasked polysilicon portion intended for a p-channel device by a film growth method selective to laser-absorbing polysilicon, wherein the extent of trimming is selected to accomplish device compensation of the p-channel and n-channel devices.

D3
Puh
F.1

Claim 23. (Amended) A method for forming a trimmed gate in a transistor comprising the steps of:
forming a polysilicon portion of a gate conductor on a substrate having a semiconductor portion; and

trimming at least an electrically significant portion of the polysilicon portion by a film growth method selective to laser-absorbing semiconductor material.

Claim 36. (Amended) A method for forming selectively compensated semiconductor devices comprising the steps of:

forming a plurality of polysilicon portions of gate conductors on a substrate having a semiconductor portion;
masking at least one polysilicon portion intended for a n-channel device;
trimming at least an electrically significant portion of one unmasked polysilicon portion intended for a p-channel device by a film growth method selective to laser-absorbing polysilicon, wherein the extent of trimming is selected to accomplish device compensation of the p-channel and n-channel devices.

Please add the following new claim(s):

Claim 25. The method of claim 23, wherein trimming at least an electrically significant portion of the polysilicon portion comprises reacting the polysilicon portion to a depth of at least ten nanometers.

Claim 26. The method of claim 23, wherein trimming at least an electrically significant portion of the polysilicon portion comprises reacting the polysilicon portion to a depth within a range of 10 to 100 nanometers.

Claim 27. The method of claim 23, wherein the selective film growth method comprises selective surface nitridation.

Claim 28. The method of claim 27, wherein the step of trimming the gate conductor by selective surface nitridation comprises exposing structures formed on the

semiconductor portion to 50-1000 expose pulses of laser irradiation with an energy fluence of 200-700 mJ/cm² in the presence of ammonia at a pressure of 10-1500 torr.

~~43~~
Claim 29. The method of claim 28, wherein the laser irradiation is of a wavelength absorbed by the gate material selective to surrounding materials.

~~45~~
Claim 30. The method of claim 28, wherein the step of trimming the gate conductor by selective surface nitridation comprises exposing structures formed on the semiconductor portion to about 150 expose pulses of 308 nm laser irradiation with an energy fluence of 400-500 mJ/cm² in the presence of ammonia at a pressure of about 300-500 torr.

~~46~~
Claim 31. The method of claim 30, wherein ammonia is supplied at about 100 ccm/min.

~~47~~
Claim 32. The method of claim 23, wherein the step of trimming at least an electrically significant portion of the polysilicon portion further comprises selectively compensating n-channel and p-channel devices.

~~48~~
Claim 33. The method of claim 23, additionally comprising the step of at least partially removing the trimming film.

~~49~~
Claim 34. The method of claim 23, wherein the trimming film is anisotropically etched, forming gate conductor spacers.

~~50~~
Claim 35. The method of claim 23, wherein the trimming film is silicon-rich and the method further comprises the step of forming additional nitride or oxide layers on the trimming film.

⁵¹
Claim 40. The method of claim 36, wherein the step of trimming the gate conductor comprises exposing polysilicon to laser irradiation of 308 nanometer wavelength.

⁵²
Claim 41. A method for trimming at least a portion of at least one structure on a semiconductor substrate, the structure comprising a material, the method comprising the steps of:

opening a mask to expose the at least a portion of the at least one structure;
abutting the surface of the at least a portion of the at least one structure with a pressurized nitrogen compound atmosphere; and
irradiating the at least a portion of the at least one structure through the open mask with a laser, the laser having a wavelength adapted to be absorbed by the material of the structure, wherein a power and pulse repetition of the laser and the pressure and a flow rate of the nitrogen compound are controlled to produce a nitride film on the at least a portion of the at least one structure.

Claim 42. The method of claim 41, further comprising the step of etching at least a portion of the nitride film selective to the material of the structure.

Added dependent claims 25-35 were submitted with the RCE but, because of a typographical error, depended from a withdrawn claim, and so were apparently not entered or considered by the Examiner. The typographical error has been corrected. Dependent claim 40 has been added to further delineate the novel aspects of Applicants' invention. Independent claim 41 and its dependent claim 42 have been added to delineate broader protection for Applicants' invention. Applicants request entry and consideration of these claims.